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## THE VELVET ANTS (HYMENOPTERA: MUTILLIDAE) OF THE CRIMEAN PENINSULA

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The review of 38 species in 15 genera of Mutillidae is given. The distribution of the genus *Ctenotilla* Bischoff, 1920 and six species and one subspecies in Russia are limited by the Crimean Peninsula only. The new synonymy is proposed for *Nemka viduata viduata* (Pallas, 1773) = *Mutilla simplicia* Radoszkowski, 1865, **syn. n.**, = *M. pauperata* Sichel et Radoszkowski, 1869, **syn. n.** The status of *Mutilla petiolata* Baer, 1846 is reinstated in the genus *Dasytilla* Radoszkowski, 1885: *D. petiolata* (Baer, 1848), **stat. resurr., comb. n.** and new synonymy is proposed: *D. petiolata* Baer, 1848 = *D. italica* var. *miogramma* Skorikov, 1935, **syn. n.** The lectotype is designated for *Mutilla simplicia* Radoszkowski, 1865 and neotype is designated for *Mutilla petiolata* Baer, 1848. *Physetopoda scutellaris* (Latreille, 1792) is newly recorded from Crimea. The extralimital new records are: *Smicromyrme tristis* Lelej, 1984 from Czech Republic, Slovakia and Bulgaria and *Skorikovia pliginskiji* (Lelej, 1984) from Czech Republic and Bulgaria. The number of species and genera in the fauna of Russia increased up to 66 and 18 correspondently.

KEY WORDS: Hymenoptera, Mutillidae, velvet ants, taxonomy, fauna, Crimea, Eastern Europe.

А. С. Лелей<sup>1)</sup>, А. В. Фатерыга<sup>2)</sup>, С. П. Иванов<sup>3)</sup>. Осы-немки (Hymenoptera: Mutillidae) Крымского полуострова // Дальневосточный энтомолог. 2016. N 314. С. 1–24.

Дан обзор 38 видов из 15 родов ос-немок (Mutillidae). Распространение рода *Ctenotilla* Bischoff, 1920, а также шести видов и одного подвида в России ограничено только Крымским полуостровом. Новая синонимия предложена для *Nemka viduata viduata* (Pallas, 1773) = *Mutilla simplicia* Radoszkowski, 1865, **syn. n.**, = *M. pauperata* Sichel et Radoszkowski, 1869, **syn. n.** Восстановлен статус *Mutilla petiolata* Baer, 1846 в роде *Dasylabris* Radoszkowski, 1885: *D. petiolata* (Baer, 1848), **stat. resurr.**, **comb. n.** и предложена новая синонимия: *D. petiolata* Baer, 1848 = *D. italica* var. *miogramma* Skorikov, 1935, **syn. n.** Обозначен лектотип для *Mutilla simplicia* Radoszkowski, 1865 и неотип для *Mutilla petiolata* Baer, 1848. *Physetopoda scutellaris* (Latreille, 1792) указывается впервые для Крыма. Кроме того, *Smicromyrme tristis* Lelej, 1984 впервые приводится из Чехии, Словакии и Болгарии, а *Skorikovia pliginskiji* (Lelej, 1984) – из Чехии и Болгарии. Число видов и родов ос-немок в фауне России возросло до 66 и 18 соответственно.

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## INTRODUCTION

The Crimean Peninsula is situated between 44°23' and 46°19' of northern latitude and 32°30' and 36°40' of eastern longitude. The distance from the most northern point of the peninsula to the most southern one is 207 km; that from east to west is 324 km. The area of Crimea is about 26 900 km<sup>2</sup>. The peninsula is divided to two main orographical parts: a large flat part on the north and mountain part on the south. Seven major habitat zones can be recognized in Crimea: semi-desert steppes and saline lands, true steppes (mainly tilled), premontane forest steppes, forests of the northern mountain slopes, mountain meadows and yayla steppes, forests of the southern mountain slopes, and submediterranean vegetation of the south coast (Biodiversity Support Program, 1999). Most mutillid species occur in steppe and saline. The Crimean Peninsula includes two administrative regions of Russia: Republic of Crimea and Sevastopol. Arabat Spit northwards 45°45'N is the part of Genichesk district of Kherson Province, Ukraine (Fig. 1).

The first velvet ants were collected from Crimea by P.S. Pallas, who lived and investigated the Crimean Peninsula in 1793–1810 (Wikipedia). Some of these specimens were identified by Pallas and later used by O. Radoszkowski with manuscript names in his papers (Radoszkowski, 1865; Sichel & Radoszkowski, 1869–1870). In XIX and beginning of XX centuries the mutillids were collected by A.A. Kouchakevitch, V.G. Pliginskij, N.R. Kokuev, V.N. Vutshetish, A.N. Kiritshenko, and others.

The first described mutillid species from Crimea was *Mutilla taurica* Gistel, 1857: 41, ♀ ("Tauria"), which currently belongs to the species *incertae sedis*. Later (Radoszkowski, 1865, 1866; Sichel & Radoszkowski, 1869–1870) described six nominal species with type locality "Crimée" (all are synonyms) and recorded 16 nominal species from Crimea for eight valid species. A.S. Skorikov (1927, 1935) described six nominal taxa (one valid and five synonyms) and A.S. Lelej (1984a, b) described two valid species from "Krym". Before this paper 35 species in 15 genera were known from the Crimean Peninsula (Lelej & Shlyakhtenok, 2015).

After the adding of mutillid fauna of Crimea (current paper) the number of mutillid taxa from Russia increased from 60 species in 17 genera (Lelej *et al.*, 2014) up to 66 species and one subspecies in 18 genera.



Fig. 1. Main habitat zones of the Crimean Peninsula. (Modified from: Biodiversity Support Program, 1999).

## MATERIAL AND METHODS

Mutillid specimens collected in Crimea were examined in the collections of the V.I. Vernadsky Crimean Federal University, Simferopol, Russia [CFUS] (former V.I. Vernadsky Taurida National University) (556 specimens), Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia [ZIN] (366 specimens), Institute of Biology and Soil Science, Vladivostok, Russia [IBSS] (241 specimens). Additional materials were studied in the Zoological Museum of Moscow State University, Russia [ZMMU], Museum für Naturkunde der Humboldt-Universität, Berlin, Germany [MNHU], and Oberösterreichisches Landesmuseum Linz, Austria [OLML].

The regionalization of the European part of Russia for the distribution as follows: **North** (Murmansk Prov., Arkhangelsk Prov., Karelia Rep., Vologda Prov., Komi Rep.); **North-West** (Kaliningrad Prov., Leningradskaya Prov., Pskov Prov., Novgorod Prov.); **Central** (Tver Prov., Yaroslavl Prov., Kostroma Prov., Smolensk Prov., Moscow Prov., Vladimir Prov., Ivanovo Prov., Nizhegorodskaya Prov., Kaluga Prov., Tula Prov., Ryazan Prov., Mordovia Rep., Bryansk Prov., Orel Prov., Lipetsk Prov., Tambov Prov., Penza Prov., Kursk Prov., Belgorod Prov., Voronezh Prov.); **East** (Kirov Prov., Udmurtia Rep., Mary El Rep., Chuvash Rep., Tatarstan Rep., Ulyanovsk Prov., Samara Prov., Saratov Prov.); **South** (Rostov Prov., Volgograd Prov., Kalmyk Rep., Astrakhan Prov.); **North Caucasus** (Krasnodar Terr., Stavropol Terr., Adygea Rep., Karachaevo-Cherkesk Rep., Ingushetia Rep., Kabardino-Balkariya Rep., Severnaya Ossetia Rep., Chechnya Rep., Dagestan Rep.); **Crimea** (Rep. of Crimea, Sevastopol).

The abbreviations of the collectors as follow: AF – A. Fateryga, AL – A. Lelej, SI – S. Ivanov. New records are asterisked (\*). The distribution of the species outside of Crimea follows Lelej (2002).

## LIST OF THE SPECIES OF MUTILLIDAE FROM THE CRIMEAN PENINSULA

### Subfamily Myrmosinae

#### ***Krombeinella longicollis* (Tournier, 1889)**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Kikineiz (currently Opolznevoye), 3.IX 1928, 1 ♀, A. Kiritshenko; Nikitsky Botanical Garden, 3.VII 1953, 1 ♂, G. Dlusskij [ZIN]; Kazantip Cape, 25 km N Lenino, 1–2.VII 1979, 4 ♂, A. Kotenko, AL [IBSS]; Lenino distr., Zolotoye, 5.VII 1999, 5 ♂, SI [CFUS, IBSS]; Lenino distr., Zavetnoye, south slope of Mt. Daurgaoba and Mt. Chatrtav, 22.VII 2015, 1 ♂, V. Zhidkov [IBSS].

**DISTRIBUTION.** Russia (European part: Crimea, South, North Caucasus), Slovakia, Romania, Bulgaria, Croatia, Yugoslavia (here and in the text: Serbia, Kosovo, Montenegro), Macedonia, Ukraine, Hungary, Greece, Turkey.

#### ***Krombeinella wolfi* (Invrea, 1963)**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Sary Krym, Mt. Agarmysh, 722 m, 4.VII 1979, 2 ♂, V. Tolkanits [IBSS]; 5 km S Planerskoye (currently Koktebel), Karadag, 17.VI 1918, 8–21.V 1920, 1 ♀, 1 ♂, V. Vutshetits [ZIN].

**DISTRIBUTION.** Russia (Crimea), Yugoslavia, Bulgaria, Ukraine, Turkey, Georgia, Azerbaijan.

#### ***Myrmosa atra atra* Panzer, 1801**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Sary Krym, Mt. Agarmysh, 722 m, 4.VII 1979, 1 ♂, AL; 8 km NW Alushta, Angarsky Pass, 752 m, 12.VII 1979, 1 ♂, A. Kotenko [IBSS].

DISTRIBUTION. Russia (European part from Crimea northwards to Saint Petersburg–Kostroma, eastwards to Orenburg Prov., Sverdlovsk Prov., Altai Terr., Khakassia, Tuva, Krasnoyarsk Terr., Yakutsk), Sweden, Finland, United Kingdom, Belgium, the Netherlands, Germany, Poland, Estonia, Latvia, Belarus, Ukraine, Austria, Czech Republic, Slovakia, Hungary, Switzerland, France, Spain, Portugal, Italy, Slovenia, Croatia, Bosnia-Herzegovina, Serbia, Montenegro, Romania, Turkey, Kazakhstan (except south), Kyrgyzstan, ?Iran (Lelej & Schmid-Egger, 2005; Lelej *et al.*, 2014).

***Paramyrmosa brunnipes* (Lepeletier, 1845)**

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Echkidag, 2–9.IX 1978, 1 ♀ [IBSS].

DISTRIBUTION. Russia (European part: Crimea, Central, South, North Caucasus), Germany, Poland, Ukraine, Czech Republic, Slovakia, Austria, Hungary, Romania, Bulgaria, Greece, Albania, Slovenia, Croatia, Bosnia-Herzegovina, Yugoslavia, Macedonia, Italy, France, Spain, Portugal, Armenia, Turkey.

**Subfamily Myrmillinae**

***Myrmilla* (*Myrmilla*) *caucasica* (Kolenati, 1846)**

*Mutilla erythrocephala* Fabricius: Radoszkowski, 1865: 440, ♀, tab. 7, fig. 7 ("Crimée").

*Mutilla corniculata* Sichel & Radoszkowski, 1869: 163, tab. 7, fig. 1, ♀ ("France méridionale, Grèce, Syra, Corfou, Caucase, Crimée, Anatolie"). This record from Crimea belongs to *Myrmilla caucasica* (Kolenati, 1846).

*Mutilla cornuta* Olivier: Sichel & Radoszkowski, 1869: 169, ♀ ♂ ("Crimée").

*Myrmilla kiritschenkoi* Skorikov, 1927: 36, ♀ [lectotype (Lelej, 1985), ♀, "St. Belbek, Sevastop. zh. d., Krym, 10.VI 1897, N. Kuznetsov"], examined [ZIN]. This species was dedicated to A.N. Kiritsheko. Junior subjective synonym of *Mutilla caucasica* Kolenati, 1846 according to Lelej, 1985: 99.

MATERIAL EXAMINED. 24 ♀ [CFUS], 27 ♀, 1 ♂ [IBSS]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Bol. Atlesh; Simferopol distr., Ayan; Belogorsk distr., Belaya Skala; Sarych Cape; Sarych Cape; Katsiveli; Yalta, Sovetskoye; Feodosiya, Lis'ya Bay; Feodosiya, Kurortnoye; Karadag; Kazantip Cape. Sevastopol: Belbek (currently Verkhnesadovoye).

DISTRIBUTION. Russia (European part: Crimea, South, North Caucasus), Bulgaria, Greece, Ukraine, Georgia, Azerbaijan, Armenia, Turkey, Iran.

SEASONAL DYNAMIC. The males and females are active from April to September (14.IV–13.IX) with the peak of activity in July (Fig. 2).

***Myrmilla* (*Myrmilla*) *lezginica* (Radoszkowski, 1885)**

*Myrmilla kokujevi* Skorikov, 1927: 39, ♀ [lectotype (Lelej, 1985), ♀, "Mekenziev y gory, Sevastopol, Krym, 28.IV 1910, V. Pliginskij"], examined [ZIN]. Junior subjective synonym of *Mutilla lezginica* Radoszkowski, 1885 according to Lelej, 1978: 79.

**MATERIAL EXAMINED.** **Russia:** paralectotypes of *M. kokujevi*: Sevastopol: khutor Delagarda, 1 ♀, V. Pliginskij; Mekenzievy gory, 9.V 1908, 1 ♀, V. Pliginskij [ZIN]. Additional material: Republic of Crimea: Bakhchisaray distr., Rechnoye, 2.V 1980, 1 ♀, Shcherbatenko; Sudak–Novy Svet, 27.V 1988, 1 ♀ [IBSS]. Sevastopol: Sevastopol, 20.VII 1989, 1 ♀, SI [IBSS].

**DISTRIBUTION.** Russia (European Part: Crimea, North Caucasus), Greece, Yugoslavia, Macedonia, Bulgaria, Romania, Ukraine, Georgia, Azerbaijan, Uzbekistan, Turkmenistan, Syria, Palestine, Turkey, Iran.

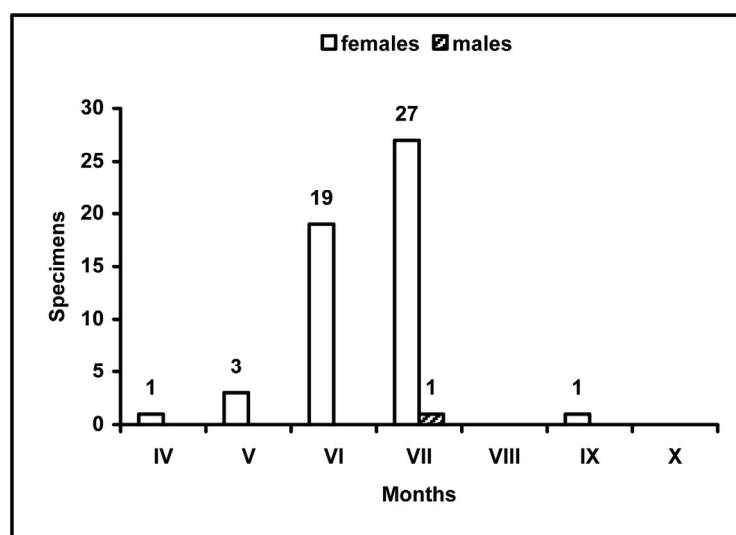


Fig. 2. Seasonal dynamic of *Myrmilla caucasica* (Kolenati) in Crimea.

***Myrmilla (Myrmilla) mutica* (André, 1903)**

*Myrmilla mutica*: Ljubomirov, 2011: 35, 63, ♀ (Crimea).

**MATERIAL EXAMINED.** No specimens examined.

**DISTRIBUTION.** Russia (Crimea), Italy, Greece, Albania, Bosnia-Herzegovina, Serbia, Macedonia, Montenegro, Croatia, Romania, Hungary, Czech Republic, Slovakia, Turkey (Hatay), Egypt (Ljubomirov, 2011).

***Myrmilla (Pseudomutilla) glabrata* (Fabricius, 1775)**

*Mutilla cephalica* Sichel & Radoszkowski, 1869: 153, 166, ♀ [lectotype (Petersen, 1988: 162), ♀, "Russie, Saratow"]. Junior subjective synonym of *Mutilla glabrata* Fabricius, 1775 according to Petersen, 1988: 161.

*Myrmilla sarmatica* Skorikov, 1927: 41, ♀ [lectotype (Lelej, 1985), ♀, "Kerch, 6.VII 1902, Kir[itshenko]", Krym], examined [ZIN]. Junior subjective synonym of *Mutilla cephalica* Sichel & Radoszkowski, 1869 according to Lelej, 1978: 79.

**MATERIAL EXAMINED.** 35 ♀, 6 ♂ [CFUS], 30 ♀, 5 ♂ [IBSS]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Bol. Kastel; Tarkhankut, Olenevka; Chernomorskoye distr., Gromovo; Simferopol; Tuak (currently Rybachye); Echkidag; Feodosiya, Lis'ya Bay; Feodosiya, Kurortnoye; Feodosiya, Barakol Lake; Kazantip Cape. **Ukraine:** Kherson Prov.: 30 km S Genichesk, 29.VI 1979, 3 ♀, AL.

**DISTRIBUTION.** Russia (European part: Crimea, Central, East, South, North Caucasus; South Ural), Austria, Hungary, Romania, Bulgaria, Yugoslavia, Macedonia, Greece, Ukraine, Kazakhstan, Uzbekistan, Turkey, Syria.

**SEASONAL DYNAMIC.** The males and females are active from May to August (24.V–21.VIII) with the peak of activity in June (Fig. 3).

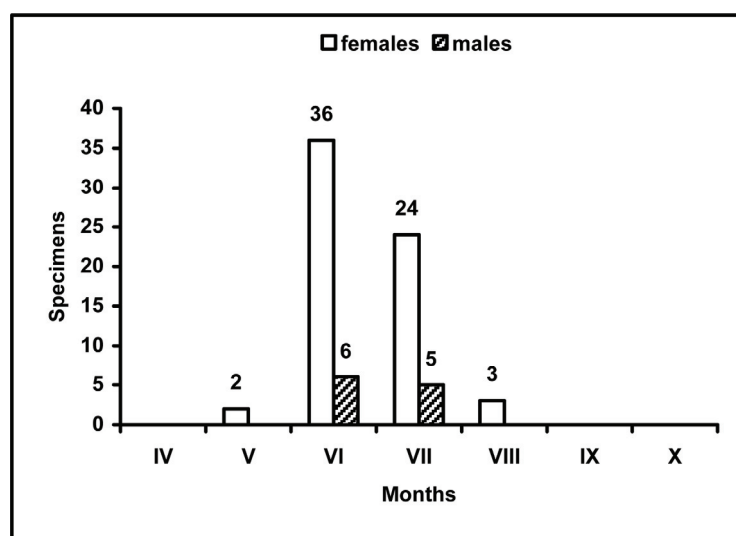


Fig. 3. Seasonal dynamic of *Myrmilla glabrata* (Fabricius) in Crimea.

***Myrmilla (Pseudomutilla) vutshetitshi* Skorikov, 1927**

*Myrmilla vutshetitshi* Skorikov, 1927: 41, ♀ [lectotype (Lelej, 1985), ♀, "Meganom Cape near Tokluk, Sudak area, Krym, 23.V 1924, V. Vutshetitsh"], examined [ZIN].

**MATERIAL EXAMINED.** 15 ♀, 7 ♂ [CFUS], 16 ♀, 3 ♂ [ZIN], 19 ♀, 56 ♂ [IBSS]. **Russia:** Republic of Crimea: Tarkhankut Peninsula; Chernomorskoye distr., Gromovo; Yevpatoria; Bakhchisaray distr., Rechnoye; Nizhnegorsky; Stary Krym, Mt. Agarmysh; Kikineiz (currently Opolznevoye); Gaspra; Yalta; Mys Mart'yan Reserve; Gurzuf; Frunzenskoye (currently Partenit); Alushta; Angarsky Pass; Tuak (currently Rybachye); Sudak; Feodosiya, Lis'ya Bay; Feodosiya, Mt. Pilotka; Karadag; Kazantip Cape; Opuk Reserve. Sevastopol: Inkerman; Mekenzievy gory; Balaklava.

DISTRIBUTION. Russia (European part: Crimea, North Caucasus), Austria, Romania, Bulgaria, Greece, Ukraine, Turkey, Syria.

HOST PLANT. One female was collected in Crimea on *Verbascum phoeniceum* (Scrophulariaceae).

SEASONAL DYNAMIC. The males and females are active from May to September (21.V–12.IX) with the peak of activity in July (Fig. 4).

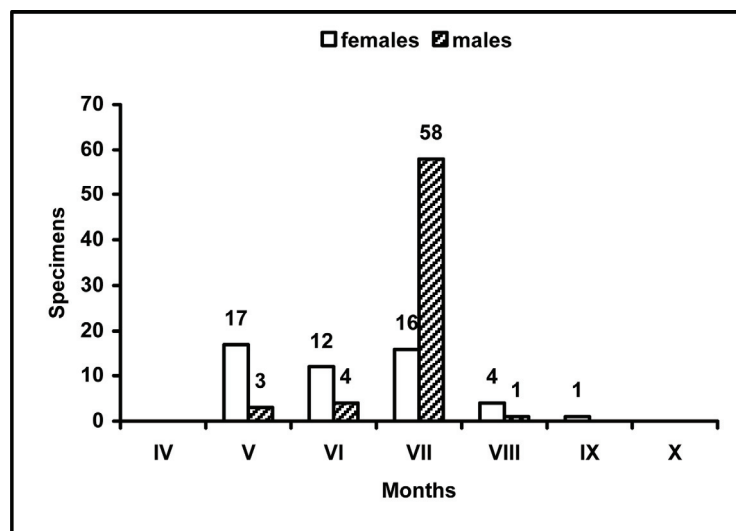


Fig. 4. Seasonal dynamic of *Myrmilla vutshetitshi* Skorikov in Crimea.

#### Subfamily Mutillinae

##### Tribe Mutillini

#### *Ctenotilla caeca* (Radoszkowski, 1880)

MATERIAL EXAMINED. 29 ♀, 39 ♂ [CFUS], 10 ♀, 58 ♂ [ZIN]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Bol. Kastel; Tarkhankut, Dzhangul; Chernomorskoye distr., Gromovo; Saki distr., Popovka–Shtormovoye; Yevpatoria; Bakhchisaray distr., Beregovoye; Feodosiya, Lis'ya Bay; Feodosiya, Kurortnoye; Karadag. Sevastopol: Belbek (currently Verkhnesadovoye); Khersones.

DISTRIBUTION. Russia (Crimea), Romania, Bulgaria, Greece, Croatia, Yugoslavia, Macedonia, Armenia, Azerbaijan, Turkey, Iran, Syria.

HOST PLANTS. The males were collected in Crimea on *Euphorbia seguieriana* (Euphorbiaceae) and *Astrodaucus orientalis* (Apiaceae).

SEASONAL DYNAMIC. The males and females are active from May to October (24.V–2.X) with the peak activity of females in June and males in July (Fig. 5).



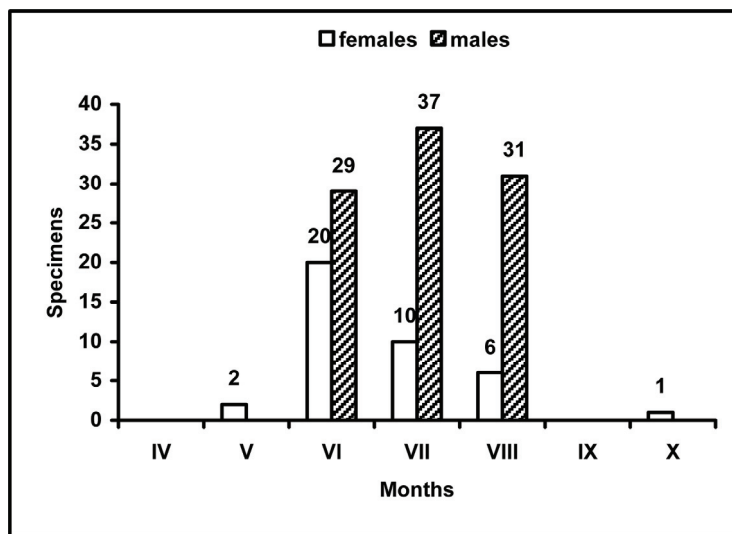


Fig. 5. Seasonal dynamic of *Ctenotilla caeca* (Radoszkowski) in Crimea.

### ***Mutilla europaea* Linnaeus, 1758**

*Mutilla europaea* Linnaeus, var.  $\gamma$  (*M. obscura* Nylander, *M. kaschiriensis* Baer): Radoszkowski, 1865: 437, ♂ ("Crimée").

**MATERIAL EXAMINED.** No specimens examined. The record from Crimea based on Radoszkowski (1865).

**DISTRIBUTION.** Russia (European part: Crimea, North, North-West, Central, North Caucasus; South Ural; Western Siberia), Europe: from Sweden and Finland to Spain, Kazakhstan, Turkey, North Africa (Lelej & Schmid-Egger, 2005).

### ***Mutilla marginata* Baer, 1848**

**MATERIAL EXAMINED.** No specimens examined.

**DISTRIBUTION.** Russia (European part: North-West, East; South Ural), Czech Republic, Slovakia, Germany, Austria, Switzerland, Hungary, Romania, Ukraine, Bulgaria, Italy, Spain, Georgia, Turkey, Syria (Lelej & Schmid-Egger, 2005).

**REMARKS.** Widely distributed European species, which parasitize on various bumblebees (*Bombus* spp.) (Apidae) (Bogusch, 2006), and should be found in Crimea also.

### ***Mutilla quinque maculata* Cyrillo, 1787**

*Mutilla quinquepunctata* Olivier: Radoszkowski, 1866: 299, ♀ ("Crimée").

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Yalta, Gruzport, 20.VIII 2004, 30.VI, 1–5.VII 2005, 5 ♀, AF [CFUS, IBSS].

DISTRIBUTION. Russia (Crimea), Spain, France, Italy, Malta, Croatia, Greece, Cyprus, Syria, Palestine, Turkey, North Africa: Algeria, Egypt.

HOST. All examined specimens were found in or reared from the nests of the bee *Anthidium florentinum* (Fabricius, 1775) (Megachilidae) (Fig. 6). Five nests of this bee species made in reed stems were collected 18.VIII 2004 with the help of trap-nest; after two days the nests were dissected. Each bee nest was sealed with a transversal partition made of masticated leaves and a final wooly plug made of plant trichomes; the cells were made also of plant wool. Four of five nests contained holes made by females of *M. quinquemaculata* through the nest seal to the bee cocoon in the last nest cell; in two of them the females of *M. quinquemaculata* were gone off but two other contained them seating inside (Fig. 6). Three females of *M. quinquemaculata* emerged from the infested nests of *A. florentinum* in 2005, the pupa of *M. quinquemaculata* in the fourth nest died. It is noticeably that only the last nest cell was infested in each bee nest (the number of cells in infested nests was 2, 3, 4, and 6; the fifth, intact nest had 4 cells).

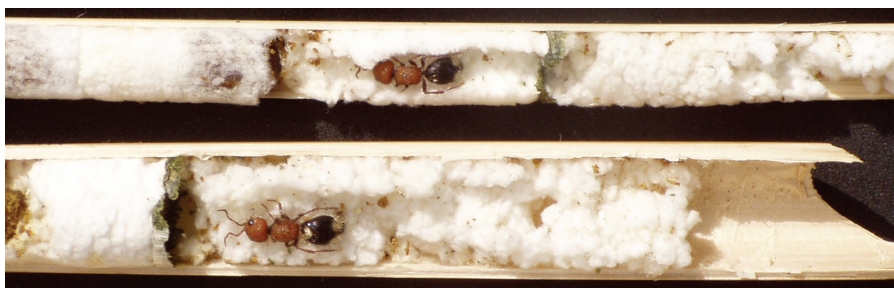


Fig. 6. Nests of *Anthidium florentinum* (Fabricius) with two females of *Mutilla quinquemaculata* Cyrillo. Photo by A. Fateryga and S. Ivanov.

### ***Ronisia brutia brutia* (Petagna, 1787)**

*Mutilla taurica* Radoszkowski, 1865: 454, tab. 8, fig. 7, ♂ ["Crimée" (Krym), syntypes in Institute of Systematics and Evolution of Animals, Kraków, Poland], nom. praeocc., non Gistel, 1857: 41. Junior subjective synonym of *Mutilla brutia* Petagna, 1787, according to André, 1903: 459.

*Mutilla hungarica* Fabricius: Radoszkowski, 1865: 450, tab. 7, fig. 3, ♀ ("Crimée, Caucase, Orenburg, Oural"). This record from Crimea belongs to *Ronisia brutia brutia* (Petagna, 1787).

*Mutilla brutia* Petagna: Sichel & Radoszkowski, 1870: 216, tab. 10, fig. 8, ♀ ♂ ("Crimée").

*Mutilla ghilianii* Spinola: Sichel & Radoszkowski, 1870: 279, ♂ ("Crimée"). This record from Crimea belongs to *Ronisia brutia brutia* (Petagna, 1787).

*Mutilla crimeae* Strand, 1917: 99. New name for *Mutilla taurica* Radoszkowski, 1865. Junior subjective synonym of *Mutilla brutia* Petagna, 1787 according to Lelej & Schmid-Egger, 2005: 1527.

MATERIAL EXAMINED. 48 ♀, 10 ♂ [CFUS], 8 ♀, 1 ♂ [IBSS]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Kipchak–Dzhangul; Tarkhankut,

Olenevka; Chernomorskoye distr., Gromovo; Yevpatoria; Sasyk Lake; Simferopol, Mar'ino; Simferopol distr., Dem'yanovka; Simferopol distr., Urozhaynoye; Sarych Cape; Opolznevoye, Zori Ukrainy (currently Zori Rossii); Katsiveli; Gurzuf; Kanaka; Sudak, Mt. Karauloba; Echkidag; Feodosiya, Lis'ya Bay; Karadag; 25 km N Lenino. Sevastopol: Sevastopol; Kazach'ya Bay; Laspi Bay. **Ukraine:** Kherson Prov.: 30 km S Genichesk.

**DISTRIBUTION.** Russia (European part: Crimea, East, South, North Caucasus; South Ural), Austria, Czech Republic, Slovakia, Germany (south), France, Italy, Malta, Croatia, Hungary, Yugoslavia, Macedonia, Greece, Bulgaria, Ukraine, Kazakhstan (west), Turkey.

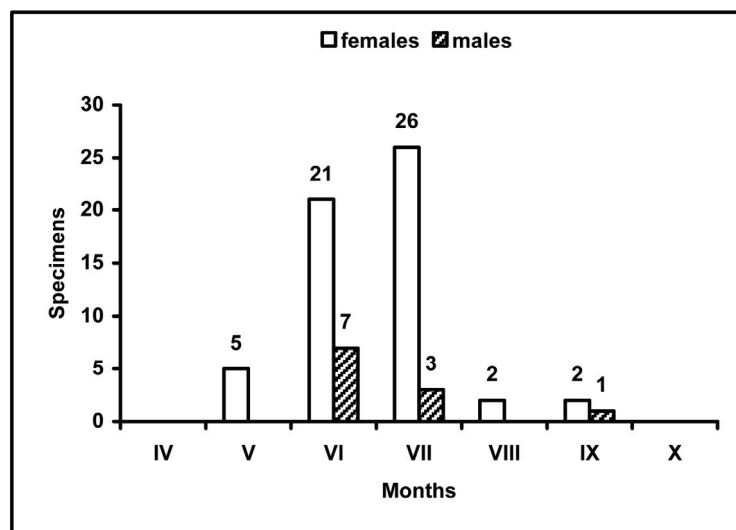


Fig. 7. Seasonal dynamic of *Ronisia brutia brutia* (Petagna) in Crimea.

**SEASONAL DYNAMIC.** The males and females are active from May to September (12.V–15.IX) with the peak of activity in June–July (Fig. 7).

**HOST.** One male was reared from the nest of the bee *Megachile albisepta* (Klug, 1817) (Megachilidae) by V. Zhidkov (Crimea, Echkidag, Sept. 2014).

#### ***Tropidotilla grisescens* (Lepeletier de Saint Fargeau, 1845)**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Mukhalatka (currently Oliva), 30.VI, 7.VII 1900, 2 ♀, Ageyenko; Kikineiz (currently Opolznevoye), 5.IX 1916, 1.IX 1926, 14.VI 1927, 30.VIII 1930, 4 ♀, A. Kiritshenko; Tuak (currently Rybachye), 26.VII 1930, 1 ♀, A. Kiritshenko [ZIN]; Echkidag, Mt. Delyametkaya, 611 m, 7.VI 2014, 1 ♀, AF; Feodosiya, Lis'ya Bay, 26.VI 2009, 6.VI 2012, 2 ♀,

AF, SI [CFUS]; Karadag, 25.V 1924, 1 ♀, V. Vutshetish [ZIN]; Karadag, 14.VI 2008, 1 ♀, SI [CFUS]. Sevastopol: Belbek (currently Verkhnesadovoye), 14.V, 21.VII, 4.VIII 1897, 1 ♀, 2 ♂, Kuznetsov; Sevastopol, 6, 16.V 1910, 5.VIII 1912, 5 ♀, 1 ♂, V. Pliginskij [ZIN].

DISTRIBUTION. Russia (Crimea), Greece, Bulgaria, Croatia, Yugoslavia, Macedonia, Italy, France, Turkey, North Africa: Algeria.

***Tropidotilla litoralis* (Petagna, 1787)**

*Mutilla quinquefasciata* Olivier: Radoszkowski, 1865: 439, ♀, tab. 7, fig. 13 ("Crimée").

*Mutilla italica* Fabricius: Radoszkowski, 1865: 458, tab. 7, fig. 9, ♂ ("Crimée"); Sichel & Radoszkowski, 1870: 263, ♂ ("Crimée").

*Mutilla litoralis* Petagna: Sichel & Radoszkowski, 1870: 180, ♀ ♂ ("Crimée").

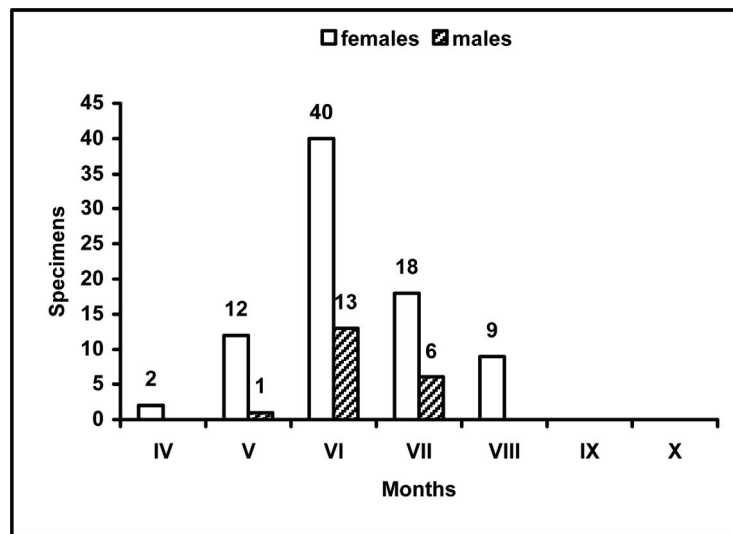


Fig. 8. Seasonal dynamic of *Tropidotilla litoralis* (Petagna) in Crimea.

MATERIAL EXAMINED. 77 ♀, 17 ♂ [CFUS], 50 ♀, 2 ♂ [ZIN], 4 ♀, 3 ♂ [IBSS]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Kipchak–Dzhangul; Chernomorskoye distr., Medvedevo, Belyaus; Yevpatoria, Moynaki Lake; Kikineiz (currently Opolznevoye); Novy Svet; Feodosiya, Lis'ya Bay; Feodosiya, Tikhaya Bay; Feodosiya, Enyshary; Karadag; Karadag, Mt. Legener; Karadag, Mt. Beshtash; Lenino distr., Zolotoye; Lenino distr., Yakovenkovo; Opuk Reserve; Kerch. Sevastopol: Inkerman; khutor Delagarda; Mekenzievyy gory.

DISTRIBUTION. Russia (European part: Crimea, South, North Caucasus), Spain, Portugal, France, Belgium, Switzerland, Austria, Hungary, Czech Republic, Romania, Bulgaria, Croatia, Yugoslavia, Macedonia, Albania, Greece, Italy, Ukraine, Georgia, Armenia, Azerbaijan, Turkmenistan (Kopetdag), Iran (north), Turkey, Syria, Palestine, North Africa: Morocco, Algeria, Egypt.

SEASONAL DYNAMIC. The males and females are active from April to August (24.IV–5.VIII) with the peak of activity in June (Fig. 8).

### Tribe Smicromyrmini

#### *Nemka viduata viduata* (Pallas, 1773)

*Mutilla simplicia* Radoszkowski, 1865: 439, tab. 7, fig. 12, ♀, "Crimée", lectotype (designated here): "*Tauria / simplicata* Rad. / Krim, 18.VIII [18]62" [MNHU], examined. **Syn. n.** Junior subjective synonym of *Mutilla brutia* Petagna, 1787 according to André, 1903: 459.

*Mutilla coronata* Fabricius: Radoszkowski, 1866: 301, tab. 9, fig. 2, ♀ ("Crimée").

*Mutilla pauperata* Sichel & Radoszkowski, 1869: 153, 195, ♀ ["Crimée (apportée par le Colonel Kouchakévitch)"]. **Syn. n.** Junior objective synonym of *Mutilla simplicia* Radoszkowski, 1865.



Fig. 9. *Mutilla simplicia* Radoszkowski, ♀, lectotype. Pygidial area and labels. Photo by A. Lelej.

MATERIAL EXAMINED. 64 ♀, 91 ♂ [CFUS]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Tarkhankut, Kipchak–Dzhangul; Tarkhankut, Bol. Kastel; Tarkhankut, Mal. Kastel; Chernomorskoye distr., Medvedevo, Belyaus; Razdolnoye distr., Portovoye; Razdolnoye distr., Kropotkino; Saki distr., Popovka–Shtormovoye; Saki distr., Pribrezhnoye; Mirnoye; Yevpatoria, Moynaki Lake; Kanaka Reserve; Sudak, Voron River; Echkidag; Feodosiya, Lis'ya Bay; Feodosiya, Kurortnoye; Feodosiya, Primorsky; Karadag; Lenino distr., Zolotoye; Kazantip Cape; Opuk Reserve; Kerch. Sevastopol: Sevastopol; Kazach'ya Bay; Orlinoe.

**DISTRIBUTION.** Russia (European part: Crimea, East, South, North Caucasus; South Ural; Western Siberia: Altai), Ukraine, Spain, France, Italy, Malta, Greece, Slovenia, Croatia, Bosnia-Herzegovina, Yugoslavia, Macedonia, Albania, Austria, Bulgaria, Hungary, Romania, Czech Republic, Slovakia, Turkey, Syria, Georgia, Azerbaijan, Armenia, Kazakhstan, Mongolia (north-west).

**HOST PLANTS.** The males were collected in Crimea on *Euphorbia seguieriana* (Euphorbiaceae) and *Peganum harmala* (Nitrariaceae).

**SEASONAL DYNAMIC.** The males and females are active from June to September (7.VI–26.IX) with the peak of activity in June–July (Fig. 10).

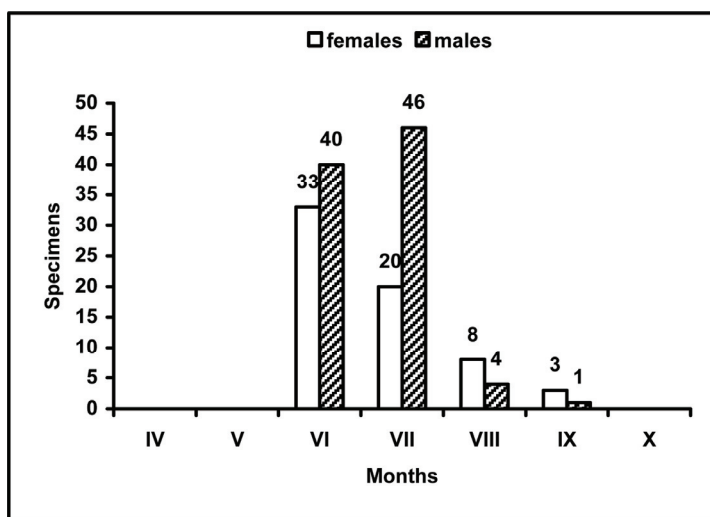


Fig. 10. Seasonal dynamic of *Nemka viduata viduata* (Pallas) in Crimea.

**REMARKS.** The lectotype of *Mutilla simplicia* Radoszkowski, 1865, which was described from Crimea, lacking setae on metasoma dorsally and was synonymized under *Ronisio brutia* (Petagna, 1787) (André, 1903). A pygidial area (Fig. 9) definitely shows that lectotype belongs to the genus *Nemka* Lelej, 1985 which is presented in Crimea by *N. viduata viduata* (Pallas, 1773). We do not know the reason why the females of *Mutilla simplicia* Radoszkowski, 1865 from Crimea were redescribed as *M. pauperata* Sichel & Radoszkowski, 1869.

#### ***Physetopoda daghestanica* (Radoszkowski, 1885)**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Dzhankoy, 16.VI 1926, 1♂, V. Kuznetsov [ZIN]. Sevastopol: near Gorbaty Most, 29.VI 2006, 1 ♂, I. Turbanov [IBSS].

**DISTRIBUTION.** Russia (European part: Crimea, South; Western Siberia: Altai), France, Italy (including Sicily), Croatia, Serbia, Montenegro, Macedonia, Switzerland, Greece, Germany, Romania, Hungary, Ukraine, Austria, Czech Republic, Slovakia, Turkey, Kazakhstan.

***Physetopoda halensis* (Fabricius, 1787)**

*Mutilla montana* Panzer: Radoszkowski, 1865, 446, ♀ ("Crimée").

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Tauria, 1 ♀, A. Yakovlev; Yevpatoria, 1 ♀, V. Yakovlev; Simferopol, 26.VI 1907, 1 ♀ [ZIN]; Simferopol distr., Urozhaynoye, 3.VIII 2012, 1 ♂, V. Zhidkov; Simferopol distr., Ayan, 23.VII 2003, 17.V 2013, 1 ♀, 1 ♂, AF; Belogorsk distr., Tavel'skoye reservoir, 26.VII 2014, 6 ♂, D. Puzanov; Zelenogor'ye, 12.IV 2005, 1 ♀, AF; Feodosiya, Lis'ya Bay, 10.VI 2014, 1 ♀, AF [IBSS]; Karadag, 30.III–12.IV 1920, 1 ♀, V. Vutshetitsk; Kerch, 30.VI 1901, 10.IV 1906, 2 ♀ [ZIN]. Sevastopol: Belbek (currently Verkhnesadovoye), 5.V 1922, 1 ♀; Sevastopol, 27.VII 1907, 18.IV 1908, 5 ♀, V. Pliginskij; Als (currently Morozovka), 30.VII, 4.VIII 1907, 3 ♂, V. Pliginskij [ZIN].

DISTRIBUTION. Russia (European part: Crimea, Central, East, South, North Caucasus; South Ural; Western Siberia: Altai), Germany, Czech Republic, Slovakia, Austria, Switzerland, Italy, Romania, Hungary, Slovenia, Croatia, Serbia, Montenegro, Bosnia-Herzegovina, Macedonia, Bulgaria, Greece, Ukraine, Kazakhstan.

***Physetopoda scutellaris* (Latreille, 1792)**

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Tarkhankut, Kipchak, 15.VI, 5.VII 2014, 2 ♂, V. Zhidkov; Chernomorskoye distr., Medvedevo, Belyaus, sweeping on *Melilotus* (Fabaceae), 9.VI 2011, 1 ♂, SI; Feodosiya, Kurortnoye, 29.VII 2003, 1 ♂, SI [IBSS].

DISTRIBUTION. Russia (European part: \*Crimea; Eastern Siberia: Khakassia, Tuva), Spain, Austria, Switzerland, Italy, Slovenia, Croatia, Serbia, France, Germany, Czech Republic, Slovakia, Greece, Romania, Hungary, Armenia, ?Algeria, ?Tunisia (Lelej *et al.*, 2014).

***Physetopoda similis* (Lelej, 1984)**

*Paramyrme similis* Lelej, 1984b: 103, 111, figs 17, 18, ♂ [holotype, ♂, "Armenia, Asni, 28.VI 1961, V. Richter"], examined [ZIN].

MATERIAL EXAMINED. **Russia:** paratypes: Republic of Crimea: Tarkhankut, Olenevka, 26.VII 1978, 1 ♂, V. Gorbatovskij; Tarkhankut, 8–10 km N Olenevka, rocky slope, 24.VII 1979, 1 ♂, A. Kotenko; Kazantip Cape, 25 km N Lenino, 1.VII 1979, 2 ♂, A. Kotenko, AL [IBSS]. Sevastopol: Sevastopol, 29.V 1906, 20, 30.VI 1912, 9 ♂, V. Pliginskij [ZIN]. Additional material: Republic of Crimea: Tarkhankut, Kipchak, 25.VI 2005, 2 ♂, AF, 26–27.VI 2013, 1 ♂, V. Zhidkov; Tarkhankut, Olenevka, 6.VII 1983, 1 ♀, V. Gorbatovskij [IBSS].

DISTRIBUTION. Russia (Crimea), Turkey, Armenia, Azerbaijan.

***Skorikovia pliginskiji* (Lelej, 1984)**

*Smicromyrme pliginskiji* Lelej, 1984a: 81, fig. 1, 1–3, ♂ [holotype, ♂, Crimea, Sevastopol, 27.VII 1909, V. Pliginskij], examined [ZIN].

**MATERIAL EXAMINED.** **Russia:** paratypes of *Smicromyrme pliginskiji*: Republic of Crimea: Kazantip Cape, 25 km N Lenino, 2.VII 1979, 1 ♂, A. Petrenko [IBSS]. Sevastopol: khutor Delagarda, 21.VII 1907, 1 ♂, V. Pliginskij; Sevastopol, 26.VII 1909, 1 ♂, V. Pliginskij [ZIN]. Additional material: **Czech Republic:** Moravia merid., Němčičky, 30.V 1944, 1 ♂, A. Hoffer [OLML]. **Bulgaria:** Slnčev Brjag, 28.VI–14.VII 1971, 5 ♂, Z. Padr [OLML].

**DISTRIBUTION.** Russia (European part: Crimea, South, East; South Ural), Italy (Toscana), Croatia, Greece, Hungary, Serbia (Muskovits & György, 2011), \*Czech Republic, \*Bulgaria.

#### ***Smicromyrme (Astomyrme) ausonius* Invrea, 1950**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Krasnoperekopsk distr., Krasnoarmeyskoye, 15.VII 1972, 1 ♂, Evstigneyev; Opolznevoye, 30.VI 2012, 1 ♀, AF; Yalta, Gruzport, 25.IV 2012, 29.IV 2013, 3 ♀, AF; Feodosiya, Lis'ya Bay, 14.VI 2007, 1 ♀, AF; Karadag, 13.V 2013, 1 ♀, AF [IBSS]. Sevastopol: Mayachny Peninsula, 7.IX 2006, 1 ♂, SI [IBSS]. Besides we examined 11 ♀, 3 ♂ from Kastropol (currently Beregovoye), Kikineiz (currently Opolznevoye), Natashino (near Yalta), Novy Svet, Karadag, Kerch, and Sevastopol [ZIN].

**DISTRIBUTION.** Russia (European part: Crimea, South, North Caucasus; South Ural), France (Corsica), Italy (including Sicily), Greece, Hungary, Moldova, Kazakhstan, Turkmenistan (Kopetdag), Cyprus.

#### ***Smicromyrme (Eremotilla) nigriceps* Nonveiller, 1959**

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Tarkhankut, Olenevka, 6.VII 1983, 1 ♀, V. Gorbatovskij; Yevpatoria, 24–25.VII 1980, 1 ♀ [IBSS]; Feodosiya, Lis'ya Bay, 5.VI 2005, 13, 18.VI 2010, 15.VI 2011, 1.VII 2014, 5 ♀, AF [CFUS, IBSS]. Besides we examined 20 ♀ from Kikineiz (currently Opolznevoye), Simeiz, Sudak valley, Otuzy (currently Shchebetovka) valley, Karadag, and Belbek (currently Verkhnesadovoye) [ZIN].

**DISTRIBUTION.** Russia (European part: Crimea, South, North Caucasus), Greece, Yugoslavia, Macedonia, Georgia, Armenia, Azerbaijan, Turkmenistan (Kopetdag), Iran (north).

**REMARKS.** Quite possible that female of *Smicromyrme nigriceps* Nonveiller, 1959 and male of *S. schwarzi* Suárez, 1975 are the opposite sexes of the same species, because both belong to the same subgenus *Eremotilla* Lelej, 1985 and were collected in the Lis'ya Bay, where A. Fateryga made long-term field survey.

**HOST.** In Crimea (Karadag, July 1917) it was reared from the nest of *Bembecinus tridens* (Fabricius, 1781) (Crabronidae) [ZIN].



***Smicromyrme (Eremotilla) nonveilleri* Invrea, 1954**

MATERIAL EXAMINED. 16 ♀ [CFUS], 24 ♀ [ZIN]. **Russia:** Republic of Crimea: Tarkhankut, Kipchak; Feodosia, Lis'ya Bay; Feodosia, Kurortnoye; Feodosia, Barakol Lake; Karadag. Sevastopol: Laspi Bay.

DISTRIBUTION. Russia (European part: Crimea, South), Croatia, Montenegro, Romania, Greece, Azerbaijan, Hungary, Slovakia (Lelej, 2002; Muskovits & György, 2011).

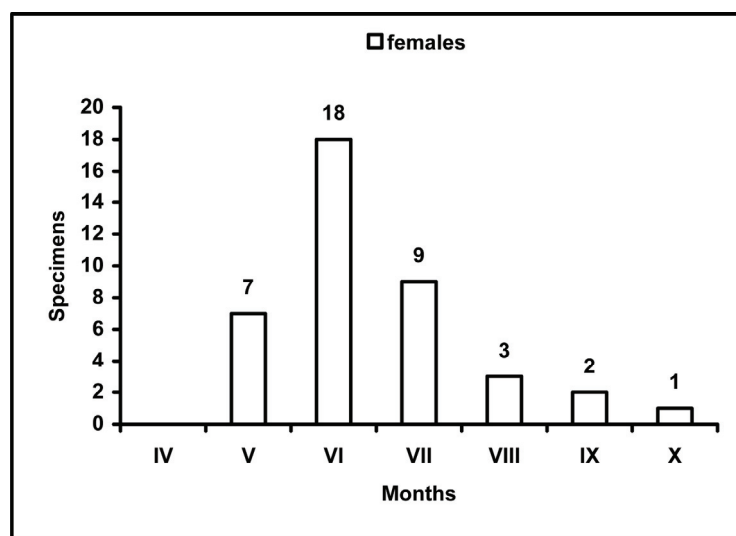


Fig. 11. Seasonal dynamic of *Smicromyrme nonveilleri* Invrea in Crimea.

SEASONAL DYNAMIC. The females are active from May to October (16.V–1.X) with the peak of activity in June (Fig. 11).

REMARKS. Quite possible that female of *Smicromyrme nonveilleri* Invrea, 1954 and male of *S. stepposus* Lelej, 1984 are the opposite sexes of the same species, because both were collected in the Lis'ya Bay, where A. Fateryga made long-term field survey.

***Smicromyrme (Eremotilla) schwarzi* Suárez, 1975**

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Stary Krym, Mt. Agarmysh, 722 m, 4.VII 1979, A. Kotenko, 1 ♂; Feodosiya, Lis'ya Bay, 10.V 2014, 1 ♂, AF [IBSS]; Karadag, 31.VI, 14.VIII 1927, 3 ♂, A. D'yakonov [ZIN]. Sevastopol: Sevastopol, 1.VI 1909, 27.VI 1912, 3 ♂, V. Pliginskij [ZIN].

DISTRIBUTION. Russia (Crimea), Greece, Ukraine (south), Georgia, Azerbaijan, Turkey.

***Smicromyrme (Eremotilla) triangularis (Radoszkowski, 1865)***

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Stary Krym, Mt. Agarmysh, 722 m, 4.VII 1979, 1 ♀, P. Puchkov; Kikineiz (currently Opolznevoye), 3.IX 1928, 2 ♀, E. Kiritshenko; Otuzy (currently Shchebetovka) valley, 30.IV–13.V 1920, 1 ♀, V. Vutshetish [ZIN]; Feodosiya, Lis'ya Bay, 12.VI 2010, 1 ♀, AF [IBSS].

DISTRIBUTION. Russia (European part: Crimea, East, North Caucasus; South Ural), Hungary, Greece, Czech Republic, Ukraine.

***Smicromyrme (Erimyrme) sicanus (De Stefani 1887)***

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Tarkhankut, Olenevka, 6.VII 1983, 2 ♀, 1 ♂, V. Gorbatovskij; Bakhchisaray distr., Belbek River, Tankovoye, 18.VII 1979, 1 ♀, 1 ♂ in copula, A. Petrenko [IBSS].

DISTRIBUTION. Russia (European part: Crimea, South; South Ural; Western Siberia: Altai), France, Italy, Yugoslavia, Croatia, Albania, Greece, Hungary, Austria, Ukraine, Czech Republic, Slovakia, Romania, Kazakhstan, Turkey, Syria.

***Smicromyrme (Erimyrme) stepposus Lelej, 1984***

*Smicromyrme stepposa* Lelej, 1984a: 81, fig. 1, 6–7, ♂ [holotype, ♂, Crimea, Sevastopol, 15.VIII 1912, V. Pliginskij], examined [ZIN].

MATERIAL EXAMINED. **Russia:** paratypes of *Smicromyrme stepposa*: Republic of Crimea: Crimea, 5.VIII 1924, on light, 1 ♂, A. D'yakonov; Saki, 20.VII 1922, 1 ♂ [ZIN]; Kazantip Cape, 25 km N Lenino, 1.VII 1979, 1 ♂, A. Kotenko [IBSS]. Sevastopol: Sevastopol, 21.IX 1902, 16.VII 1909, 5–26.VIII 1912, 11 ♂, V. Pliginskij [ZIN]. Additional material: Republic of Crimea: Feodosiya, Lis'ya Bay, 5.VII 2005, 1 ♂, AF [IBSS].

DISTRIBUTION. Russia (European part: Crimea, South); Kazakhstan (west).

***Smicromyrme (Smicromyrme) ruficollis ruficollis (Fabricius, 1793)***

*Smicromyrme kiritshenkoae* Skorikov, 1935: 315, ♀ [holotype, ♀, Krym, Kikineiz (currently Opolznevoye), 12.IX 1926, Kiritshenko] [ZIN]. This species was dedicated to E.M. Kiritshenko. Junior subjective synonym of *Mutilla ruficollis* Fabricius, 1793 according to Lelej, 1985: 234.

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Tarkhankut, Kipchak, 27.VI 2007, 1 ♀, AF; Chernomorskoye distr., Gromovo, 24.V 1988, 1 ♀, SI [IBSS].

DISTRIBUTION. Russia (European part: Crimea, South; Western Siberia: Altai), Ukraine, Italy, Austria, Croatia, Bosnia-Herzegovina, Yugoslavia, Macedonia, Greece, Bulgaria, Spain, France, Malta, Kazakhstan, Turkey.

### ***Smicromyrme (Smicromyrme) rufipes (Fabricius, 1787)***

MATERIAL EXAMINED. **Russia:** Sevastopol: Mekenzievy gory, 30.V 1912, 1 ♀, V. Pliginskij [ZIN]. **Ukraine:** Kherson Prov.: 30 km S Genichesk, 29.VI 1979, 3 ♀, AL [IBSS].

DISTRIBUTION. Russia (European part: Crimea, North, North-West, Central, East, South; South Ural; Western Siberia: Altai; Eastern Siberia: Yakutsk), Spain (north), France, Italy (north), Slovenia, Croatia, Bosnia-Herzegovina, Serbia, Montenegro, Switzerland, Austria, Germany, Hungary, Czech Republic, Slovakia, Ukraine, Belarus, Lithuania, Latvia, Estonia, Sweden, Finland, Great Britain, Kazakhstan, Turkey (Lelej & Schmid-Egger, 2005).

### ***Smicromyrme (Smicromyrme) tristis Lelej, 1984***

*Smicromyrme (Smicromyrme) tristis* Lelej, 1984a: 82, figs 1, 8–10, 2, 1, ♂ [holotype, ♂, Kazakhstan, 10–30 km NEE Derzhavisk, 4.VII 1977, V. Kazenas] [ZIN].

MATERIAL EXAMINED. **Russia:** paratype: Republic of Crimea: Simferopol, 27.VII 1920, 1 ♂, E. Yatsentkovskiy [ZIN]. Additional material: Republic of Crimea: Krasnoperekopsk distr., Krasnoarmeyskoye, 13.VII 1972, 1 ♂, Evstigneyev [IBSS]. **Czech Republic:** Moravia, Kobyly, 9.VI 1956, 15.VII 1979, 2 ♂, Kocourek [OLML]. **Slovakia:** Gbelce, 13.VII 1974, 1 ♂, Z. Padr [OLML]; Štúrovo, 8.VIII 1959, 1 ♂, Z. Padr [OLML]; Veľký Kamenec, 1.VII 1977, 1 ♂, Z. Padr [OLML]; Chotín, 22.VII 1962, 1.VII 1977, 1 ♂, Z. Padr [OLML]; 22.VI 1960, 18.VI 1961, 2 ♂, Z. Padr [IBSS]; Kráľovský Chlmec, 25.VII 1969, 1 ♂, Z. Padr [IBSS]. **Bulgaria:** Slnčev Brjag, 25, 26, 29.VII 1968, VIII 1968, 4 ♂, Kocourek, Z. Padr [OLML]; 28.VI–14.VII 1971, 1 ♂, Z. Padr [IBSS]; Sandanski, 27.VI 1961, 2 ♂, Kocourek [OLML].

DISTRIBUTION. Russia (European part: Crimea; South Ural); Austria, \*Czech Republic (Moravia), \*Slovakia, \*Bulgaria, Ukraine (south), Kazakhstan (Ockermüller & Lelej, 2010).

## **Tribe Trogaspidiini**

### ***Trogaspidia catanensis (Rossi, 1794)***

*Mutilla interrupta* Klug: Radoszkowski, 1865, 446, ♀ ("Crimée").

*Mutilla ballioni* Radoszkowski, 1866, 300, pl. 9, fig. 1, ♂ ("apporté par Mr. Kouchakevitz de la Crimée"); Sichel & Radoszkowski, 1870: 288, ♂ ("Crimée"). Junior subjective synonym of *Trogaspidia catanensis* (Rossi, 1794) according to Lelej, 1985: 176.

*Mutilla paripunctata* Sichel & Radoszkowski, 1869: 156, 222, ♀ (not ♂) ("Crimée, Sarepta"). Junior subjective synonym of *Mutilla catanensis* Rossi, 1794 according to André, 1899: 12.

MATERIAL EXAMINED. **Russia:** paralectotype of *Mutilla paripunctata* Sichel & Radoszkowski: ♀, "*paripunctata* / Tauria / Kuschak[evitch] / Type / Coll.

Radosz. / Zool. Muz. Berlin" [MNHU] (Fig. 12). Additional material: Republic of Crimea: Feodosiya, Lis'ya Bay, 5.VII 2005, 12.VI 2010, 1.VI 2012, 16.VII 2013, 10.VI 2014, 4 ♀, 2 ♂, AF, SI, V. Zhidkov; Feodosiya, Shchebetovka, 10.VI 2012, 1 ♀, SI; Karadag, 3.VIII 1997, 7, 27.V, 12.VI 2013, 2 ♀, 2 ♂, AF, SI [CFUS].

DISTRIBUTION. Russia (European part: Crimea, South), Hungary, Romania, Croatia, Serbia, Montenegro, Macedonia, Greece, Italy, Turkey, Armenia, Kazakhstan (west), Algeria.

HOST PLANTS. One female was collected on *Dorycnium herbaceum* (Fabaceae).



Fig. 12. *Mutilla paripunctata* Sichel & Radoszkowski, paralectotype, labels.  
Photo by A. Lelej.

#### Subfamily Sphaerophthalminae

##### *Cystomutilla ruficeps* (Smith, 1855)

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Tuak (currently Rybachye), 2.VIII 1930, 1 ♀, A. Kiritshenko; Otuzy (currently Shchebetovka) valley, 25.V 1924, 1 ♂, V. Vutshetish [ZIN].

DISTRIBUTION. Russia (European part: Crimea, South), Great Britain, France, Switzerland, Austria, Italy, Slovakia, Hungary, Romania, Croatia, Albania, Greece, Spain, Ukraine, Georgia, North Africa: Algeria.

#### Subfamily Dasylabrinae

##### *Dasylabris (Craspedopyga) manderstiernii manderstiernii* (Radoszkowski, 1865)

MATERIAL EXAMINED. **Russia:** Republic of Crimea: Simferopol, 1932, 1 ♀ (Batsylev) [ZMMU].

DISTRIBUTION. Russia (European part: Crimea, North Caucasus), Georgia, Armenia, Azerbaijan, Turkmenistan (Ashgabat), Iran (north), Turkey, Lebanon, Syria (Lelej, 2002).

***Dasylabris (Dasylabris) maura maura* (Linnaeus, 1758)**

MATERIAL EXAMINED. 23 ♀, 12 ♂ [CFUS], 84 ♀, 19 ♂ [ZIN], 14 ♀, 3 ♂ [IBSS]. **Russia:** Republic of Crimea: Donuzlav Lake; Razdolnoye distr., Kropotkino; Saki; Yevpatoria; Yevpatoria, st. Solnyshko; Bakhchisaray; Kacha River; Simferopol distr., Gvardeyskoye; Tesseli (currently Foros); Gaspra; Mt. Aypetri, Beshtekne; Kanaka Reserve; Novy Svet; Sudak, Mt. Karauloba; Sudak; Feodosiya, Lis'ya Bay; Feodosiya, Kurortnoye; Karadag, Mt. Leginer; Lenino distr., Kamenskoye; Lenino distr., Zolotoye. Sevastopol: Inkerman; Belbek (currently Verkhnesadovoye); Khersones; Balaklava. **Ukraine:** Kherson Prov., 30 km S Genichesk, 29.VI 1979, 6 ♀, 1 ♂, AL.

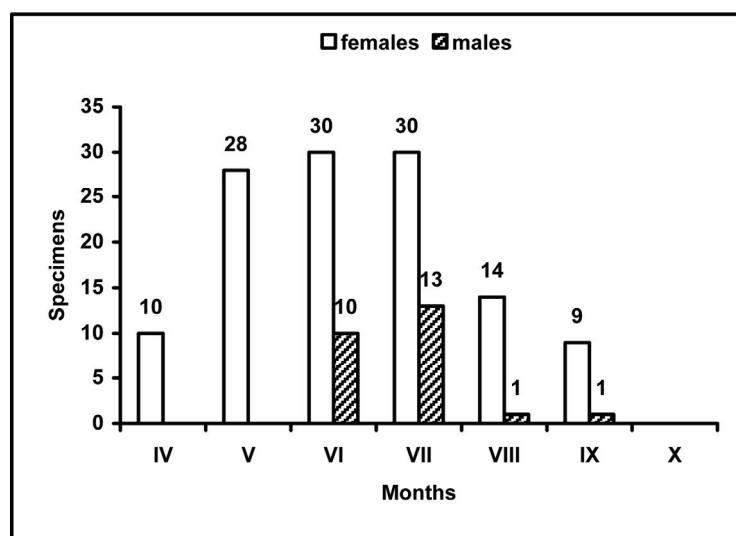


Fig. 13. Seasonal dynamic of *Dasylabris maura maura* (Linnaeus) in Crimea.

DISTRIBUTION. Russia (Crimea), France, Switzerland, Italy, Malta, Croatia, Bosnia-Herzegovina, Yugoslavia, Macedonia, Albania, Greece, Bulgaria, Hungary, Turkey, Austria, Czech Republic, Slovakia, Germany, Poland, Georgia, Armenia, Azerbaijan.

SEASONAL DYNAMIC. The males and females are active from April to September (12.IV–22.IX) with the peak of activity in June–July (Fig. 13).

***Dasylabris (Inbaltilla) petiolata* (Baer, 1848), stat. resurr., comb. n.**

*Mutilla petiolata* Baer, 1848: 231, tab. 2, fig. 7, ♀ "Habitat in regionibus meridionalibus Russiae" [Kherson, Ekaterinoslav], Taurida Governorates of Russian Empire], neotype (designated here), ♀, "Krym, 25 km N Lenino, Kazantip Cape, 1.07 1979, Lelej" [ZIN].

*Dasylabris italica* var. *miogramma* Skorikov, 1935: 297, ♀ [lectotype (Lelej, 1985), Krym, Kerch, 17.VIII 1901], examined [ZIN]. **Syn. n.**  
*Dasylabris (Inbaltilla) miogramma*: Lelej, 2002: 98, ♀ ♂.

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Tarkhankut, Kipchak, 20–21.VI 2008, 3 ♀, 4 ♂, AF; Feodosiya, Lis'ya Bay, 13–18.VI 2010, 2.VII 2011, 7 ♀, AF [CFUS]; Lenino distr., Zavetnoye, 11.VI 1963, 2 ♂, A. Osychnyuk [IBSS]. Sevastopol: Aya Cape, VII.1979, 1 ♀, A. Petrenko [IBSS]. Krasnodar Terr.: Temryuk distr., Solenoye Lake, 25.VI 2012, 10 ♀, M. Mokrousov [IBSS]. **Ukraine:** Kherson Prov.: 30 km S Genichesk, 29.VI 1979, 12 ♀, 4 ♂, AL [IBSS].

**DISTRIBUTION.** Russia (European part: Crimea, \*North Caucasus), Ukraine (south), Romania.

**REMARKS.** The reanalyzing of the short description and figure of female of *Mutilla petiolata* Baer, 1846 allows reinstating its status from the synonyms of *M. regalis* (Fabricius) and regards it as a distinct species. Because the collection of I. Baer was not conserved (Radchenko & Pesenko, 1989) we designated here the neotype of *M. petiolata* Baer from the material collected in Crimea (Kazantip Cape) [former Taurida Governorate].

### ***Dasylabris (Inbaltilla) regalis* (Fabricius, 1793)**

*Mutilla petiolaris* Radoszkowski, 1865: 448, tab. 7, fig. 15, ♀ ("Saratow, Odessa, Crimée"), nom. praeocc., nec Fabricius, 1804. Junior subjective synonym of *Dasylabris regalis* (Fabricius, 1793) according to André, 1903: 464.

*Mutilla regalis* Fabricius: Sichel & Radoszkowski, 1870: 216, ♀ ("Crimée").

*Mutilla lugubris* Fabricius: Sichel & Radoszkowski, 1870: 262, ♂ ("Crimée"). This record from Crimea belongs to *Dasylabris regalis* (Fabricius, 1793).

**MATERIAL EXAMINED.** **Russia:** Republic of Crimea: Dzhankoy distr., Solenoye Ozero, 22.VI 2004, 1 ♂, V. Gromenko; Saki distr., Popovka–Shtormovoye, 18.VII 2011, 2 ♀, AF; Simferopol distr., Skvortsovo, 1.VI 1954, 1 ♂; Opuk Reserve, 3.VI 2002, 1 ♂, SI [CFUS].

**DISTRIBUTION.** Russia (European part: Crimea, East, South, North Caucasus; South Ural; Western Siberia: Altai), Czech Republic, Slovakia, Austria, Hungary, Yugoslavia, Bulgaria, Ukraine, Kazakhstan.

### **SPECIES INCERTAE SEDIS**

*Mutilla taurica* Gistel, 1857: 41, ♀. *M. aterrima* tota, pronoto agrenteo, ex rufo micante, abdominis macula basali disciformi, fasciaque media dentata lineolaque dorsali posticali argenteis. Tauria. Abdomen petiolatum.

### **SPECIES WRONGLY DESCRIBED FROM CRIMEA**

*Mutilla aureomaculata* Sichel & Radoszkowski, 1869: 157, 255, tab. 9, fig. 1, ♀ "Crimea" [actually Africa]. Actually is a synonym of *Dasylabris merope* (Smith, 1855) (Africa) according to Bischoff, 1921: 629.

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